

By Trish Wallace, Jefferson County Journal

Dozens of the most green-minded people in the area crowded into a house on Aug. 21 in the Parc at Kimmswick subdivision in Imperial to celebrate the building's energy certification.

Dubbed "Kimmswick-1," the home is drawing the attention of people throughout the area, including U.S. Rep. Russ Carnahan, as one of the first truly "green" homes in Jefferson County.

The home building firm Applied Energy Solutions LLC (AES-LLC) built the house to prove that an energy efficient home can be built with little more cost to the developer than traditional homes. Designing Kimmswick-1 was close the heart of Olivette resident Jordan Heiman, senior partner of Applied Energy Solutions.

"One of the last things on my list was to build an energy efficient home," Heiman said.

Carnahan visited the home to present certification awards to the house's builders. The house was recently awarded the two highest awards for energy conservation and environmental design-Energy Star 5 Plus by the United States Department of Energy and LEED-Homes Platinum by the United States Green Building Council Leadership in Energy and Environmental Design (LEED).

According to Heiman, the Green Building Council is an individual organization separate from government agencies. The LEED Platinum rating signifies that the building uses only 40 percent of the energy other homes use.

"This is a great economic opportunity to help stop our dependence on foreign fuels," Carnahan said. "This is the new Apollo project."

Before visiting with those who attended the event, Carnahan answered the questions of energy conscious individuals. He discussed the importance of wind energy, hydropower and depleting greenhouse gases.

"We have to have the attitude of sacrifice," Carnahan said. "Let's sacrifice our addiction to waste."

Carnahan cosponsored the Congressional High Performance Buildings Caucus in Congress. The caucus is designed to help promote high performance buildings to other members of Congress and educate them about the multiple benefits of these buildings when legislation is introduced to promote high performance buildings.

"Russ has put himself at the nexus of energy in Congress," said Tim Michels, energy consultant and AES-LLC partner.

The exterior walls of Kimmswick-1 are constructed of concrete reinforced with steel bars, running from the footing to the roof of the house. Siding is constructed of cement and cellulose fiber, using a high recycled content. Windows are double pane. The panes are made of fiber glass, creating a tighter and longer-lasting seal. The lighting system is fluorescent.

During construction, AES-LLC tried to minimize waste and used renewable resources. The hardwood floors are made from red oak from the Missouri Ozarks. Appliances are only electric and all energy efficient products.

The temperature is regulated from 150-foot wells on the site. The house uses the temperature of the ground for stability. Piping is "super sealed" to prevent leaks using putty instead of tape. Hot water pipes are insulated to contain the heat within the pipes.

Power is provided by AmerenUE from wind farms.

Cynthia Collins of Hartke Nursery in Olivette designed three rain gardens that hold one inch of water. Rain barrels provide easy maintenance in the event of dry weather.

"This is not just good for the environment, it's smart economically," Carnahan said.

Also influential in the Kimmswick-1 project was AES-LLC architect partner Greg Polanik.

For more information about Kimmswick-1, visit the AES-LLC Web site at www.appliedenergyolutionsllc.com.

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